

## **EXECUTIVE SUMMARY**

Act 499 of 2002 changed the way we look at the condition of our roads and bridges in Michigan. Rather than periodic “needs studies” the Legislature adopted an on-going asset management process. This was the central recommendation of the Act 51 Transportation Funding Study Committee’s report to the Legislature in June 2000.

Why asset management? What makes it different from other processes? First of all, it is a strategic approach rather than tactical; that is, it considers the entire network, rather than individual projects. Asset management is proactive rather than reactive. It seeks to manage the condition of a pavement before it needs to be totally reconstructed. Asset management brings together the disciplines of engineering, planning and budgeting; disciplines that have often remained in their own silos in the past. It focuses on the function of the road rather than on ownership of the road.

Asset management allows agencies to prepare for the future by using the power of modern technology to consider a wide range of scenarios and “what if” possibilities. It allows them to answer such questions as:

- What is the impact on the construction program if there is a 10% cut in funding?
- What will the system look like in 10 years if we continue on the same path as today?
- What condition will the system be in with an additional \$1 million per year for capital preventive maintenance?

One of the most critical concerns raised during the Act 51 Transportation Funding Study Committee’s deliberations was the fact that there were a myriad of numbers being used to describe the condition of the roads. These different measures often seemed contradictory when compared to one another. The Committee stressed the need for policy makers to have one method and one method only that they could rely on. They also recommended the establishment of a body to oversee a statewide asset management process. In 2002, the Legislature created the Transportation Asset Management Council

Given the task of developing a statewide asset management process and using a single rating system, the Transportation Asset Management Council decided to use the Pavement Surface Evaluation and Rating System – PASER for short -- as the method of rating the condition of Michigan’s federal-aid eligible public roads. PASER is a visual survey that measures the surface distress on a 1-10 scale.

The Council does not report the individual ratings of a segment of road. The Council groups the ratings into three “work improvement” categories. These categories are “routine maintenance” (ratings 8, 9, 10); “capital preventive maintenance” (ratings 5, 6, 7); and “structural improvement” (ratings 1, 2, 3, and 4). These categories represent broad areas of work that might be undertaken to maintain, preserve, or improve the overall condition of the network.

During 2003, the Council rated 93,908 lane miles of federal-aid eligible public roads. Statewide there were nearly 34,170 lane miles needing routine maintenance; 49,653 lane miles needing capital preventive maintenance; and 10,085 lane miles needing structural improvement. Seven percent of the arterial system needs structural improvements while nearly 14% of the collector system needs structural work. Only 9% of the bridges on the arterial system and 6% on the collector system, are currently rated

as structurally deficient. Seventy-two percent of the bridges on the federal-aid eligible system are rated as good.

While this data provides useful information now, Michigan's efforts to establish an asset management-based process will take several years to complete. In order to develop appropriate deterioration curves, which are critical to forecasting future condition, a minimum of three years of condition data are necessary. The Council has just completed the first year of collecting statewide condition data. Also, at this time, the Council does not have sufficient information to determine what it would cost to fix these roads and bridges. During the coming year, the Council will be working with local and state road and bridge engineers to develop unit costs, determine appropriate mix of fixes and establishing deterioration rates.

The Council had a productive and successful year during 2003. The following is a list of their major accomplishments:

- Approved a work program for 2003 and submitted it to the State Transportation Commission.
- Published the First Annual Report as required by MCL 247.659a.
- Conducted a statewide survey of road agencies to determine the extent of agencies using a pavement management process.
- Assessed the condition of nearly 94,000 lane miles of federal-aid eligible roads.
- Conducted 10 training sessions with over 200 participants.
- Adopted a list of 6 priorities and began the process of developing a work program for 2004-06.
- Held Council meetings in Bay City, Bellaire, Escanaba, Gaylord, Grand Rapids, Lansing, and Waterford Township.
- Selected the Center for Geographic Information to serve as the data agency required by MCL 247.659a.
- Set up a cooperative partnership with Metropolitan Planning Organizations and Regional Planning Agencies to provide technical assistance to the Council as required by MCL 247.659a.
- Members participated in numerous meetings on asset management including:
  - Transportation Summit
  - 5<sup>th</sup> National Conference on Asset Management
  - SEMCOG University on Asset Management
  - County Road Association Annual Conference
  - Michigan Municipal League Summer Conference
  - Michigan Chapter of APWA Annual Conference